

# Notice of Allowability

## Application No.

10/772,194

## Examiner

William K Cheung

## Applicant(s)

WILCZEK, LECH

## Art Unit

1713

### -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Preliminary Amendment.
2. ☒ The allowed claim(s) is/are 5 and 6.
3. ☐ The drawings filed on \_\_\_\_\_ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

### THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 0204
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

## **DETAILED ACTION**

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with attorney Sudhir G. Deshmukh (Registration No. 33,677) on June 27, 2004.

2. Claim 5 (line 33), replace "amino." with "amino,".

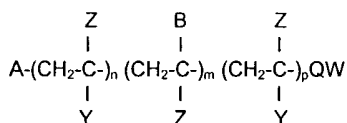
### ***Allowances***

3. Claims 5-6 are allowed.
4. The following is an examiner's statement of reasons for allowance:

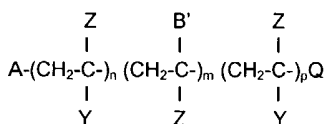
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The present claims are allowable over the closest reference of Milkovich et al. (US 3,786,116).

The invention of claims 5-6 relates to a **composition of matter** comprising a **polymer having a branch-upon-branch structure** and optionally a **polymerizable olefinic end group**, having the structure:



where B =



wherein:

$B' = Y, B$ ;

$m = 1$  to  $100$ ,  $n = 0$  to  $100$ ,  $p = 0$  to  $100$ ,  $n+m+p > 2$ ; and if  $m > 1$ , then the  $m$  insertions are consecutive or not consecutive;

$A$  = anionic initiator moiety  $R$ ;

$Q$  is selected from the group consisting of a covalent bond,  $R$ ,  $C(O)$ , and  $RC(O)$ ;

$Y$  is selected from the group consisting of  $R$ ,  $CO_2R$ ,  $CN$ , and  $NR_2$ ;

$W$  is  $CZ = CH_2$  or a non-polymerizable moiety;

$CN$ ; and

$Z$  is selected from the group consisting  $H$ ,  $R$ , and  $CN$ ; and

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*R is selected from the group consisting of unsubstituted and substituted alkyl, vinyl, aryl, aralkyl, alkaryl and organosilanyl groups, the substituents being the same or different and selected from the group consisting of carboxylic acids, carboxylic ester, hydroxyl, alkoxy, primary amino and secondary amino, wherein in (ii) Q = PhCH<sub>2</sub> and X = Cl or Br.*

The closest prior art to Milkovich et al. (col. 6, line 45 to col. 7, line 25) discloses a branched polymer prepared in the presence of an anionic initiator. However, there is no indication in Milkovich et al. that the disclosed polymer has a dense branch upon branch architecture. Therefore, Milkovich et al. do not teach or suggest the unique features of claims 5-6. The invention of claims 5-6 is allowed.

In light of the above discussion, it is evident as to why the present claims are patentable over the prior art.

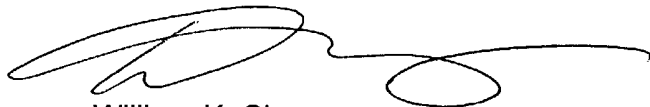
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, and to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William K Cheung whose telephone number is (571) 272-1097. The examiner can normally be reached on Monday-Friday 9:00AM to 2:00PM; 4:00PM to 8:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David WU can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



William K. Cheung

Primary Patent Examiner

June 27, 2004